



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

D3078-042
Job Sheet 170997



Part No: D3078-042

Job Qty: 4 ea

Part Name: Step Assembly, Hi Short RH



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 1/25/18

Job Tracking No:

Due Date: 2/9/18

Created By: Linda Lacelle

Type: SOLD

Description:

Note: DWG REV B IPP REV:A 15.10.21 NEW ISSUE DD VERF:JLM IPP REV:B 15.11.12 REV:C3 DD VERF:JLM
IPP REV:C 16.03.15 DWG REV:B DD VERF:JLM

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	4 Ea		2/8/18	0.00	0.00	Start Up Large Fab-4		SL 1/30/18
110	Large Fab	4 pcs		2/8/18	0.00	4.80	Large Fab 8		SL 1/30/18
120	QC	4 pcs		2/8/18	0.00	0.00	QC6		CPC
130	Large Fab	4 pcs		2/8/18	0.00	4.80	Large Fab 2		SL
140	QC	4 pcs		2/8/18	0.00	0.00	QC9		18-02-05
150	QC	4 pcs		2/8/18	0.00	0.00	QC5		18-02-05
160	HandFinish	4 pcs		2/8/18	0.00	0.83	HandFinish1		18-02-05
170	QC	4 pcs		2/8/18	0.00	0.00	QC7-2		CPC
200	Large Fab	4 pcs		2/8/18	0.00	4.80	Large Fab 2		SL
210	QC	4 pcs		2/8/18	0.00	0.00	QC10		CPC
220	QC	4 pcs		2/8/18	0.00	0.00	QC5		CPC
230	HandFinish	4 pcs		2/8/18	0.00	0.83	HandFinish6		18-02-14
240	Powdercoat	4 pcs		2/8/18	0.00	0.76	Powdercoat1		18-02-22
250	HandFinish	4 pcs		2/9/18	0.00	0.83	HandFinish3		18-02-23
260	QC	4 pcs		2/9/18	0.00	0.00	QC3		38
290	Packaging	4 pcs		2/9/18	0.00	0.00	Packaging3-1		9-88
300	QC21-SA	4 Ea		2/9/18	0.00	0.00	QC21		21 FFD 7 E 2018

Part Op 110 - 1-Cut D2622-120 extrusion to 59.75" long as per Dwg D3078

Descriptions: 130 - 1-Bevel end for welding FWD ONLY 2-Weld Support, weld Fwd End Plate as per QSI 004 & Dwg D3078

A/RAluminum Rod

200 - 1- Rivet Leg Assembly as per Dwg D3078. 4-Weld Aft End Plate as per QSI 004 & Dwg D3078 A/R Aluminum Rod

240 - START TIME: 2:00 OUT: 3:20 FINISH: 2:30 M 138461

wing walk M138761

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : _____					

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2622-120C	Step Extrusion	2 Ea (.5 ea)	90-Start up Operation	
D3067-1	End Plate - 130 of	4 Ea (1 ea)	90-Start up Operation	
D3219-3	Plate - 130 of	8 Ea (2 ea)	90-Start up Operation	
D3065-041	Step Leg Assembly	4 Ea (1 ea)	200-Large Fab	
D3066-1	Spacer	8 Ea (2 ea)	200-Large Fab	
D3067-1	End Plate	4 Ea (1 ea)	200-Large Fab	
MS20600-AD4W4	Rivet	64 Ea (16 ea)	200-Large Fab	

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	D2622-120C	2	44	0
	D3067-1	4	136	0
	D3219-3	8	37	0
200-Large Fab	D3065-041	4	24	0
	D3066-1	8	46	0
	D3067-1	4	136	0
	MS20600-AD4W4	64	1,755	0

Part Specifications

Specifications could not be found.

Plex 1/25/18 12:36 PM dart.lacelle.linda

DQA: _____ Date: _____



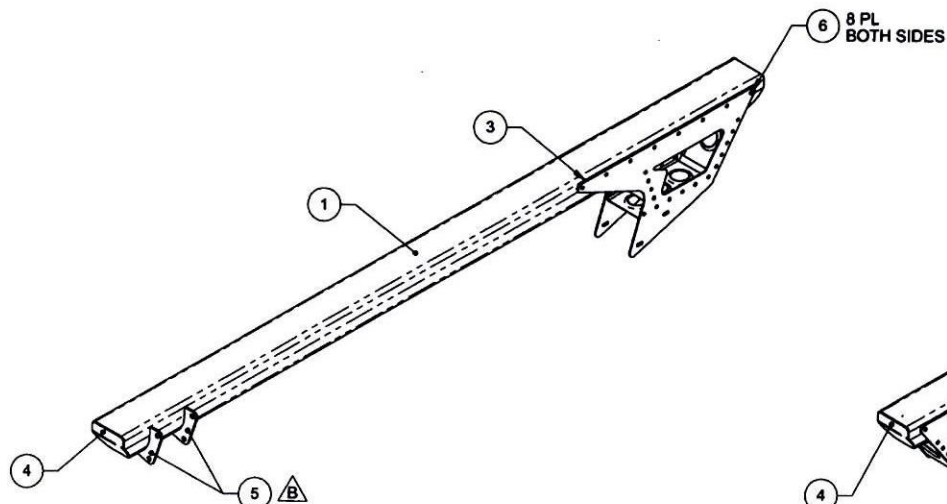
WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐								
		OTHER :							

ITEM	QTY	P/N	DESCRIPTION
	X	D3078-041	STEP ASSEMBLY, HIGH SHORT (LH)
1	1	D2622-060	STEP EXTRUSION
2	1	D3065-041	STEP LEG ASSEMBLY
3	2	D3066-1	SPACER
4	2	D3067-1	END PLATE
5	2	D3219-3	PLATE
6	16	MS20600AD4W4	RIVET, BLIND



D3078-041 STEP ASSEMBLY, HI SHORT (LH)

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 170997 1801-26

NOTES:

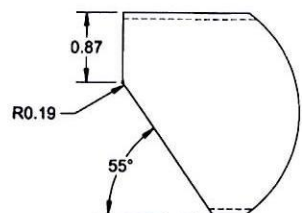
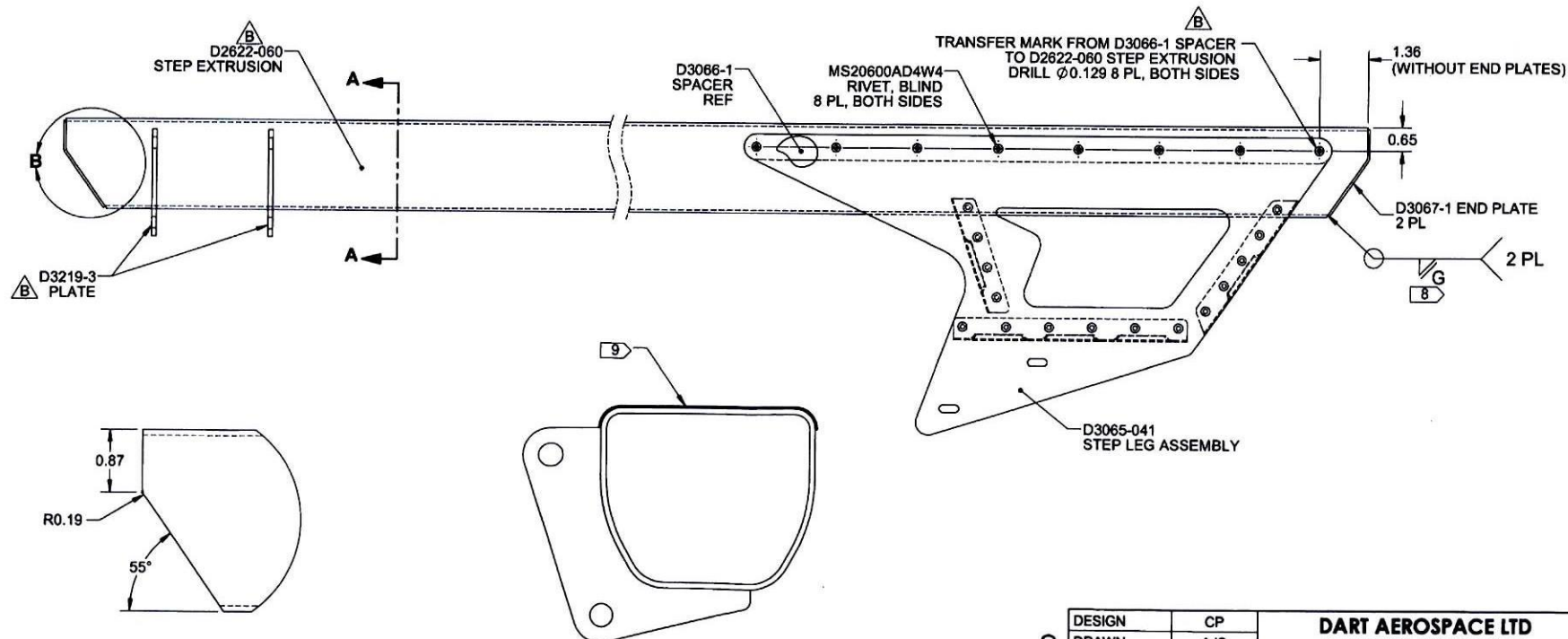
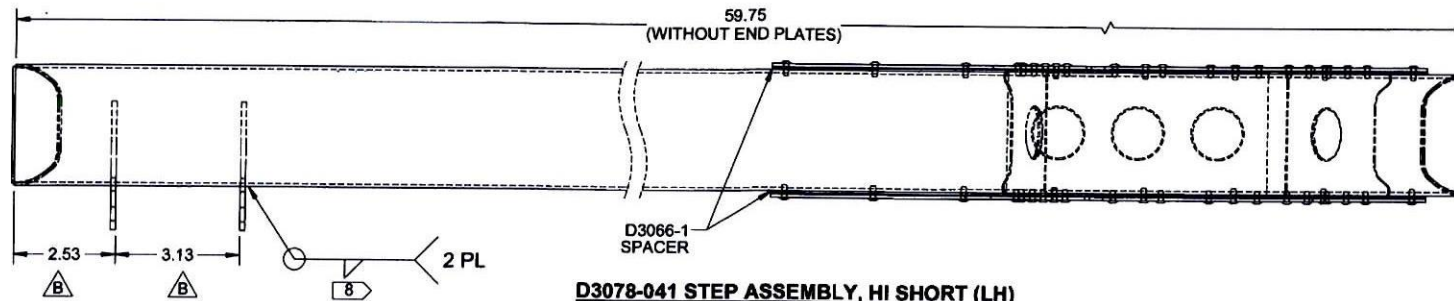
- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044
- 7) WEIGHT: 5.79 lbs
- 8) WELD PER DART QSI 004
- 9) APPLY BLACK ANTI-SKID PAINT ON THE TOP SURFACE TO THE BOTTOM
OF THE TOP RADII AS SHOWN PER DART QSI 005 4.4

RELEASED
2016-03-14

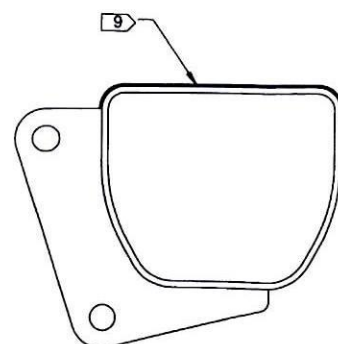
ECN 16-656

B	REDRAWN AND REFORMATED. REPLACED D3063-1 QTY 1 WITH D3219-3 QTY 2. SEE CIR 15-44. PART NUMBER FOR ITEM 1 WAS D2622-00. TRANSFER DRILL CHANGED FROM D3065-041 TO D3066-1.	AJS	15.11.04
A	NEW ISSUE	CP	02.09.11
REV.	DESCRIPTION	BY	DATE
DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO.	REV. B
CHECKED	ML	D3078	SHEET 1 OF 4
MFG. APPR.	JLM	TITLE	SCALE
APPROVED	WM	STEP ASSEMBLY, HI SHORT	NTS
DE APPR.	DS	COPYRIGHT © 2002 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	
DATE	15.11.04		

APPROVED



DETAIL B
2 PL
D3067-1 END PLATE NOT SHOWN
SCALE 2X

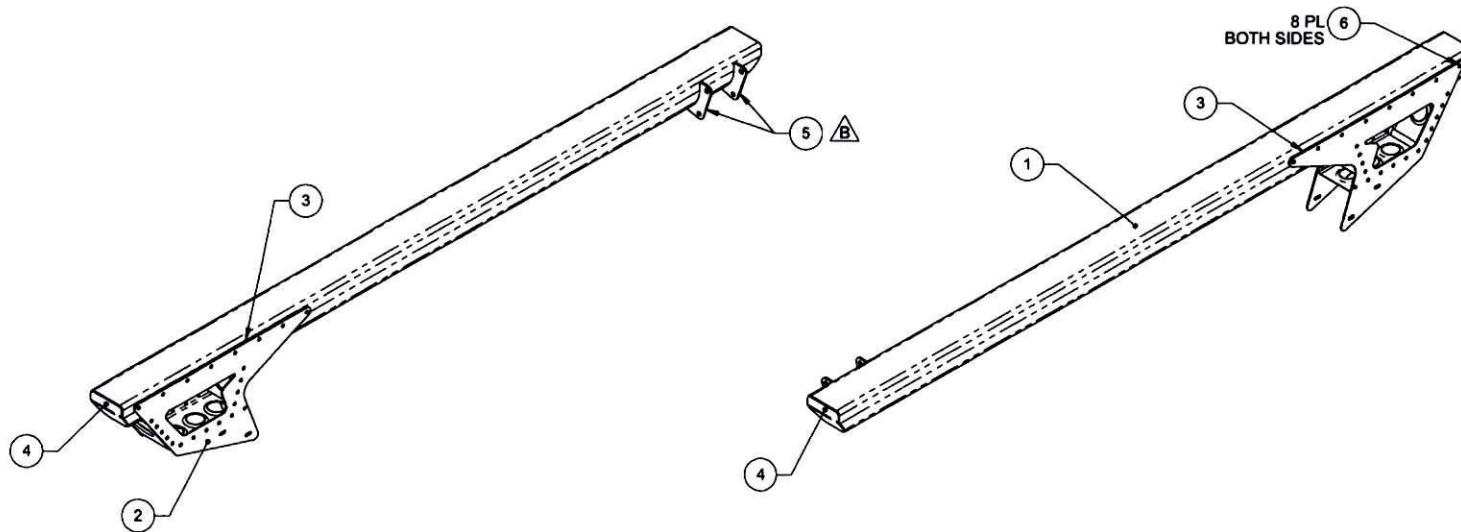


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2016-03-14

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DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
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CHECKED	ML	D3078	SHEET 2 OF 4
MFG. APPR.	JLM	TITLE	SCALE
APPROVED	WM	STEP ASSEMBLY, HI SHORT	NTS
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DATE	15.11.04		

ITEM	QTY	P/N	DESCRIPTION
	X	D3078-042	STEP ASSEMBLY, HIGH SHORT (RH)
1	1	D2622-060	STEP EXTRUSION
2	1	D3065-041	STEP LEG ASSEMBLY
3	2	D3066-1	SPACER
4	2	D3067-1	END PLATE
5	2	D3219-3	PLATE
6	16	MS20600AD4W4	RIVET, BLIND



D3078-042 STEP ASSEMBLY, HI SHORT (RH)

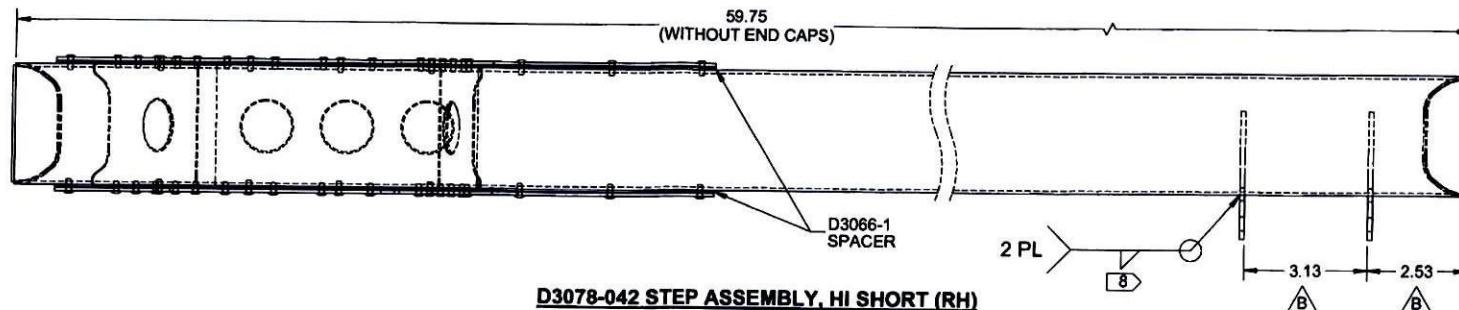
NOTES:

- 1) MATERIAL: NONE
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
POWDER COAT WHITE (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: PER QSI 044
- 7) WEIGHT: 5.79 lbs
- 8) WELD PER DART QSI 004
- 9) APPLY BLACK ANTI-SKID PAINT ON THE TOP SURFACE TO THE BOTTOM
OF THE TOP RADII AS SHOWN PER DART QSI 005 4.4

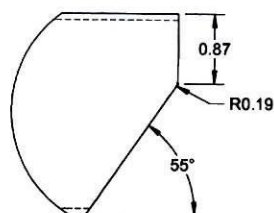
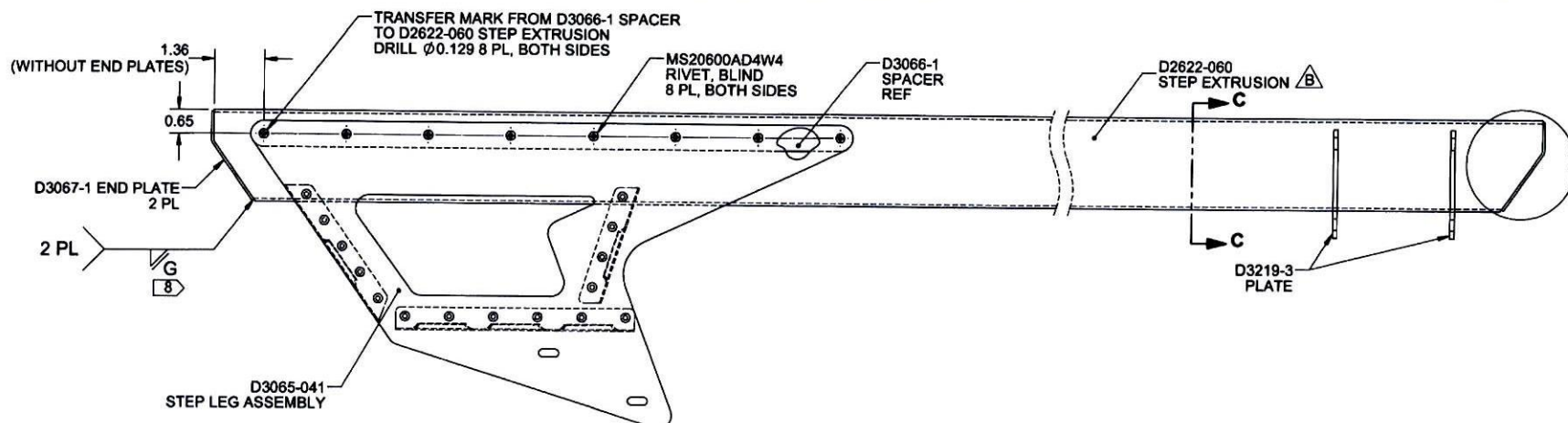
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2016-03-14

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DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	ML	DRAWING NO. D3078	REV. B
MFG. APPR.	JLM	SHEET 3 OF 4	
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	STEP ASSEMBLY, HI SHORT	NTS
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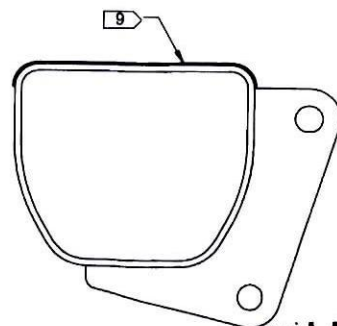


D3078-042 STEP ASSEMBLY, HI SHORT (RH)



DETAIL D

2 PL
D3067-1 END PLATE NOT SHOWN
SCALE 2X



SECTION C-C
SCALE 2X

RELEASED
2016-03-14

APPROVED

DESIGN	CP	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	ML	DRAWING NO.	REV. B
MFG. APPR.	JLM	D3078	SHEET 4 OF 4
APPROVED	WM	TITLE	SCALE
DE APPR.	DS	STEP ASSEMBLY, HI SHORT	NTS
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DART
AEROSPACE
S037016



Step Assembly, Hi Short RH

PART NO: D3078-042

Original Serial #: S037016

Revision:

Operation: Start up Operation 01/30/18

Change No:

Job No: 170997

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